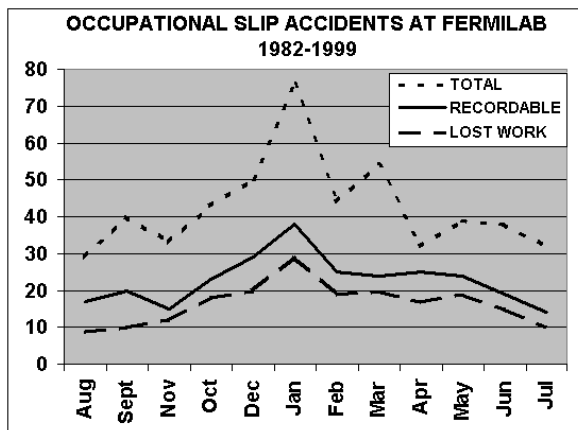




## WINTER HAZARDS... ARE YOU READY?

Although this year's fall season has been unusually mild, we all know that it is just a matter of time before some serious cold weather shows up. Therefore, it makes sense to review some of the important types of wintertime accidents that can occur around the Lab, as well as the steps you can take to prevent them. Slips on ice are probably the most important source of occupational injuries during the winter. Other hazards include vehicle accidents, problems with heaters, and cold weather exposure.

### SLIPS



Even though the Lab's overall rate of occupational injuries remains fairly constant over the year, the rate for slip accidents increases up to a factor of two during the colder months. Not surprisingly, ice is a major factor in one-half of these cases. Workers often slip on flat icy surfaces with the most serious injuries involving the back (impact to or sudden effort).

**Walk carefully** - Instead of walking heel to toe, take short flat steps to help sustain your balance. Use handrails wherever available. Wear boots with treads; add strap-on cleats if you spend a lot of time walking on ice. Leave

high-heeled shoes at home. To the extent possible, stay on cleared walkways to ensure safe passage from parking lots to your work. However, be aware that paved parking lots and walkways may still be covered with a layer of ice. Occasionally, areas that had previously been melted by salt can refreeze as temperatures drop. If you see a problem like this in a parking lot, walkway or road, please call Roads and Grounds at x3303.

**Help keep pathways clear** - Fermilab's Roads & Grounds Department is responsible for snow removal. Building managers are consulted on an annual basis to develop priorities for pathway clearance. However, road plowing must remain their top priority. If walkways and doorways in your area need clearing, please help out. In some cases salt and/or shovels have been made available for your use. *[WARNING! Avoid shoveling if you cannot do so safely.]* Contact your building manager if you would like additional ice/snow removal equipment.



### VEHICLES

**Drive Carefully** - Make sure your car windows are thoroughly cleared. Adjust your speed for road conditions. If you skid, *do not brake*. Instead, take your foot off the accelerator and turn gently into the skid. Put blankets, some candy, and water in your car in case you get stranded. To avoid carbon monoxide poisoning, keep a window opened a bit and do not run vehicles in your garage.

**Avoid parking for extended periods** - This makes snow removal difficult and increases the risk of property damage. Cars will be towed by the Lab if the owner does not move them within 10 days of being notified that the car is considered *abandoned*. Notify the Security Department if you will be out of town and leaving your car at Fermilab for an extended period.

### HEATERS

Portable heaters that burn hydrocarbon fuels (e.g., *salamanders*) can produce hazardous levels of carbon monoxide if combustion is incomplete. This is especially true in poorly ventilated areas. It's a good idea to have your division/section ES&H personnel and/or the ES&H Section check on atmospheric carbon monoxide levels when you first begin using such heaters. If you use electric portable heaters make sure that the appliance is UL listed and has an anti tip over switch built in. You can test the appliance by turning the ON switch and then slowly tipping the heater to verify that power is disconnected from the heating element. The heater should not be placed any closer than 36 inches away from combustible materials. Use the lowest heat setting that provides adequate comfort.

### COLD EXPOSURE

The wind chill is a measure of the combined effect of cold and wind on exposed flesh. The lower the wind chill, the less time it takes to cause frostbite or hypothermia.

WIND CHILL	Temperature (° F)													
	Wind (mph)	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25
	5	32	27	22	16	11	6	0	-5	-10	-15	-21	-26	-31
	10	22	16	10	3	-3	-9	-15	-22	-27	-34	-40	-46	-52
	15	16	9	2	-5	-11	-18	-25	-31	-38	-45	-51	-58	-65
	20	12	4	-3	-10	-17	-24	-31	-39	-46	-53	-60	-67	-74
	25	8	1	-7	-15	-22	-29	-36	-44	-51	-59	-66	-74	-81
	30	6	-2	-10	-18	-25	-33	-41	-49	-56	-64	-71	-79	-86
	35	4	-4	-12	-20	-27	-35	-43	-52	-58	-67	-74	-82	-92
	40	3	-5	-13	-21	-29	-37	-45	-53	-60	-69	-76	-84	-92
	Frostbite or hypothermia		Prolonged exposure			Within 1 minute						Within 30 seconds		

To avoid cold injury, wear several layers of loose fitting lightweight clothing. Outer garments should be

## Winter Hazards

tightly woven and water repellent. Mittens retain more heat than gloves. Wear proper boots for protection and comfort.

### **WEATHER-RELATED INFORMATION**

Up-to-date winter weather-related information is available at <http://www.icepack.org/>. If the weather is severe enough that there is some question about whether or not the Lab is open, a notice will be posted in red on the Fermilab at work page: <http://www.fnal.gov/faw/>. Closing information can also be obtained from the following broadcast stations or via the Fermilab severe weather hotline at 1-630-840-5995.

**WMAQ**      **670 AM**  
**WGN**      **720 AM**  
**WBBM**      **780 AM**

**CBS-TV**      **CH2**  
**WGN-TV**      **CH9**  
**FOX-TV**      **CH32**  
**CLTV-NEWS**



**Fermilab**  
**Severe Weather Hotline**  
**840-5995**

*This message should be distributed to all employees via delivery of un-addressed copies to Fermilab mail stations.  
Suggestions for ES&H message topics should be directed to Tim Miller at MS119, [tmiller@fnal.gov](mailto:tmiller@fnal.gov), or X3019.*

*Photos from <http://www.photolib.noaa.gov>.*